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Electronic Information Disclosure **Statement**

PRODUCTION OF SYNTHESIS GAS FROM A COAL FORMATION

Application:

Confirmation: 4749

Applicant(s):

Harold Vinegar

Docket

Number:

5659-09200

Group Art

Unit:

Examiner:

Unknown

(4087130 or 4537252 or re30019 or 2623596 or 3775185 or 4524113 or 5284878 or 5767584 or search string: 5955039 or 4091869 or 4513816 or 0094813 or 5008085 or 4099567 or 0048994 or 64852332 or

02/28/2003 HJEMESS1 00000084 501200200186973).pn.

Q1-FC:1806

180.00 CH

02/28/2003 HDEHESS1 00000084 09841632

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180.00 CH

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

Illinia	Citation No.	Patent Number	Date	Bar Code	Patentee	Class	Subclass
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37	P24	4537252	1985-08- 27	11110 1111 1111111111111111111111111111	Puri		
69	P25	re30019	1979-06- 05	1910 19 617 1918 1919 1919 1819 1911	Lindquist		
69	P26	2623596	1952-12- 30	1110 100 100 100 100 100 100 100 100 10	Whorton et al.		
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69	P27	3775185	27		Kunz et al.	
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Published Applications

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

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Remarks

(Remarks are not for responding to an office action.)

Please note: Foreign patent documents and non-patent references will be sent using a standard US

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PTO 1449 Form.

Signature

Examiner Name	Date
George Suchfield	5/6/04

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List of Patents and Publications
For Applicant's Information
Disclosure Statement
(Use several sheets if necessary)

OCT 0 7 2002

ATTY, DKT. NO. 5659-09200/TH2017

SERIAL NO. 09/841,632

APPLICANT: Vinegar et al.

GROUP: 1621

FILING DATE: April 24, 2001

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1	НЗ	4,895,206	Jan-90	Price) <u>H</u>		
	J1	326,439	Sep-1885	McEachen			光	130	H H
	J2	1,681,523	Feb-1928	Downey et. al.			Ë	T	C
	J3	2,244,256	Jun-1941	Looman			田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田	0 9	<u> </u>
	J4	2,714,930	Aug-1955	Carpenter			160	2002	<u> </u>
	J5	3,547,193	Dec-1970	Gill			TECH CENTER (1600)/2900	2	J
	J6	3,562,401	Feb-1971	Long			8		
	J7	4,089,374	May-1978	Тепту					
	J8	4,423,311	Dec-1983	Varney, Sr.					
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		OTHER ART (I	ncluding Author,	Title, Date, Pertinent P	ages, Etc.)				
09	Н2	Hobson, G.D., Modern Petro	leum Technology,	Halsted Press, Applied S	Science Publis	shers LTD.	1973, pp. 7	86, 78	7

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George Suchfield

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List of Patents and Publication
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ATTY. DKT. NO. 5659-09200/TH2017

SERIAL NO. 09/841,632

APPLICANT: Vinegar et al.

GROUP: 1621

FILING DATE: April 24, 2001

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EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
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69	G8	4,043,393	Aug-77	Fisher et al.		1	D & M

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Form PTO-1449 (modified) ATTY. DKT. NO. 5659-09200/II SERIAL NO. 09/841,632 List of Patents and Publications For Applicant's Information APPLICANT: Vinegar et al. GROUP: 1621 Disclosure Statement (Use several sheets if necessar FILING DATE: April 24, 2001 U.S. PATENT DOCUMENTS EXAM. REF. **DOCUMENT NUMBER** DATE NAME CLASS SUB FILING DATE IF INITIALS DES. **CLASS** APPROPRIATE 65 3,766,982 Oct-1973 Justheim

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ATTY. DKT. NO. 5659-09200/TH2017

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SERINL NO. 09/841,632

APPLICANT: Vinegar et al.

GROUP: 1621

FILING DATE: April 24, 2001

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Ī	F2	3,310,109	Mar-1967	J. W. Marx et al.			
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69	G4	Department of Energy Coal Sample Bank and Database http://www.energy.psu.edu/arg/doesb.htm, June 4, 2002.					

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ATTY. DKT. NO. 5659-09200/1

APPLICANT: Vinegar, et al.

SERIAL NO. 09/841,632

GROUP: 1621

FILING DATE: April 24, 2001

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69	EI	3,181,613	May-1965	Krueger				
1	E2	3,922,148	Nov-1975	Child	12			
	E3	3,924,680	Dec-1975	Terry	4	C	TEC	T
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	E5	5,229,102	Jul-1993	Minet et al.	ر کر ا	2 1	CH NI	$\frac{z}{\Omega}$
	E6	5,316,664	May-1994	Gregoli et al.	70	% Y	9 🖫	6 111
	E7	5,366,012	Nov-1994	Lohbeck	0		60	200
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	E9	5,861,137	Jan-1999	Edlund			8	
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69	E15	4,463,807	Aug-1984	Stoddard et al.				
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39	E12	Cortez et al., UK Patent Applic	cation GB 2,068,0	14 A, Date of Publication:	August 5, 19	981.		
69		Wellington et al., US Patent Ap						
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Page 1 of 1

Information Disclosure Statement-PTO 1449 (modified)

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement

(Use several sheets if necessary)

ATTY. DKT. NO. 5659-09200/1

APPLICANT: Vinegar, et al.

GROUP: 1621

SERIAL NO. 09/841,632

FILING DATE: April 24, 2001

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1	C2	1,457,479	6/1923	Wolcott		TECH CENTER TOU	長 (C)
	C3	1,634,236	6/1927	Ranney		宝	- 1
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	C21	3,113,619	12/1963	Reichle		<u> </u>	
<u>. </u>	C22	3,116,792	1/1964	Purre	<u></u>		
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List of Patents and Publications For Applicant's Information

Disclosure Statement (Use several sheets if necessary)

ATTY. DKT. NO. 5659-09200/

APPLICANT: Vinegar, et al.

GROUP: 1621

SERIAL NO. 09/841,632

FILING DATE: April 24, 2001

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	C32	3,352,355	11/1967	Putman	<i>\}</i>	Ma	100
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ATTY. DKT. NO. 5659-09200/

SERIAL NO. 09/841,632

GROUP: 1621

APPLICANT: Vinegar, et al. FILING DATE: April 24, 2001

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DATE CONSIDERED:

Form PTO-1449 (modified) ATTY. DKT. NO. 5659-09200/ SERIAL NO. 09/841,632 List of Patents and Publication APPLICANT: Vinegar, et al. GROUP: 1621 For Applicant's Information Disclosure Statement FILING DATE: April 24, 2001 (Use several sheets if necessar U.S. PATENT DOCUMENTS EXAM. REF. DATE NAME CLASS SUB FILING DATE IF INITIALS DES. **CLASS** APPROPRIATE C90 1/1992 5,082,055 Hemsath 6/1993 Masek C91 5,217,076 C92 5,261,490 11/1993 **Ebinuma** C93 5,285,846 2/1994 Mohn C94 3/1994 5,289,882 Moore 5/1995 C95 5,411,104 Stanley 5,632,336 5/1997 Notz et al. C96 C97 2/1998 5,713,415 **Bridges** C98 6,328,104 12/2001 Graue $\mathbf{D}1$ 3,149,670 9/1964 Grant D2 3,380,913 4/1968 Henderson 2/1974 D3 3,794,116 Higgins D44,197,911 4/1980 Anada D5 4,412,124 10/1983 Kobayashi D8 3,316,962 5/1967 Lange FOREIGN PATENT DOCUMENTS EXAM. REF. DOCUMENT NUMBER DATE COUNTRY CLASS SUB TRANSLATI DES: INITIALS CLASS ON YES/NO 69 2,015,460 CA C99 10/1991 940558 A1 C100 9/1999 EP C101 01/81723 A1 11/2001 wo C102 01/81505 AI 11/2001 wo D6 1,165,361 CA 4/1984 D7 1,168,283 CA 5/1994 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) Appalachian Coals: Potential Reservoirs for Sequestering Carbon Dioxide Emissions from Power Plants While C103 Enhancing CBM Production; C.W. Byer, et al., Proceedings of the International Coalbed Methane Symposium. The Pros and Cons of Carbon Dioxide Dumping Global Warming Concerns Have Stimulated a Search for Carbon Sequestration Technologies; C. Hanisch, Environmental Science and Technology, American Chemical Society, Easton, C104 Pilot Test Demonstrates How Carbon Dioxide Enhances Coal Bed Methane Recovery, Lanny Schoeling and Michael C105 McGovern, Petroleum Technology Digest, September 2000, p. 14-15.

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George Suchfield

DATE CONSIDERED:

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Form PTO-1449 (modified) ATTY. DKT. NO. 5659-09200/1 SERIAL NO. 09/841,632 List of Patents and Publication For Applicant's Information APPLICANT: Vinegar, et al. GROUP: 1621 MAY 1 3 2002 Disclosure Statement Situ Measurement of Some Thermoporoelasus of Maurice Biot, 1998, p. 545-550.

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DATE CONSIDERED:

SPE SERIAL NO. 09/841.632 Form PTO-1449 (modified) ATTY. DKT. NO. 5659-09200/TH List of Patents and Publications For Applicant's Information APPLICANT: Vinegar, et al. **GROUP:** JAN 0 3 2002 Disclosure Statement (Use several sheets if necessar FILING DATE: April 24, 2001 U.S. PATENT DOCUMENTS DOCUMENT NUMBER REF. DATE SUB EXAM. FILING DATE I NAME DES. appr@brlate INITIALS **ASS** 05/1904 Butler GS A1 760,304 06/1920 A2 Day 1,342,741 **A3** 10/1924 Clark 1,510,655 A4 02/1927 **Crawshaw** 1,666,488 11/1929 Α5 Karrick 1,913,395 07/1947 A6 2,423,674 Agren A7 2,444,755 07/1948 Steffen Α8 2,466,945 02/1946 Greene Α9 06/1949 2,472,445 Sprong A10 10/1949 2,484,063 Ackley ÀH 2,497,868 02/1950 Dalin 04/1951 A12 2,548,360 Germain A13 2,593,477 04/1952 Newman et al. A14 2,595,979 05/1952 Pevere et al. A15 01/1952 2,630,306 **Evans** A16 ١ 2,634,961 04/1953 Ljungstrom A17 2,642,943 06/1953 Smith et al. A18 2,670,802 03/1954 Ackley A19 2,695,163 11/1954 Pearce et al. A20 2,732,195 01-24-56 Ljungstrom A21 2,734,579 02-14-56 **Elkins** A22 2,780,449 02-05-57 Fisher et al. A23 2,777,679 01/1957 Ljungstrom A24 2,780,450 02/1957 Ljungstrom A25 2,786,660 03/1957 Alleman A26 2,789,805 04/1957 Ljungstrom A27 2,804,149 08/1957 Kile

EXAMINER: George Suchfield DATE CONSIDERED: 5/6/04

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	A35	2,974,937	03/1961	Kiel	0 42 80
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EXAMINER: George Suchfield

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Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement

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JAN 0 3 2002

ATTY. DKT. NO. 5659-09200/TH

APPLICANT: Vinegar, et al.

FILING DATE: April 24, 2001

GROUP:♀6

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1	A60	3,241,611	03/1966	Dougan		8		
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	A62	3,267,680	08/1966	Schlumberger		May CA		
	A63	3,284,281	11/1966	Thomas		15 / S / S		
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	A66	3,595,082	07/1971	Miller et al.		90		
	A67	3,973,628	08/1976	Colgate				
	A68	3,992,148	11/1975	Child				
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	A70	4,016,239	04/1977	Fenton				
	A71	4,076,761	02/1978	Chang et al.				
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ATTY. DKT. NO. 5659-09200/TF

APPLICANT: Vinegar, et al.

GROUP: 1621

SERIAL NO. 09/841,632

FILING DATE: April 24, 2001

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List of Patents and Publication
For Applicant's Information
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JAN 0 3 2002

ATTY. DKT. NO. 5659-09200/TE

APPLICANT: Vinegar, et al.

SERIAL NO. 09/841,632

GROUP: 1621

FILING DATE: April 24, 2001

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Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary) JAN 0 3 2002

ATTY. DKT. NO. 5659-09200/TI

APPLICANT: Vinegar, et al.

U.S. PATENT DOCUMENTS

FILING DATE: April 24, 2001

SERIAL NO. 09/841,632

GROUP: 1621

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	A150	5,255,742	10/1993	Mikus		H CON
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	A153	5,318,116	06/1194	Vinegar et al.		m go
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CF	A204	121,737	03/1948	Sweden			
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APPLICANT: Vinegar, et al.

FILING DATE: April 24, 2001

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George Suchfield

DATE CONSIDERED:

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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18 Stylesheet Version v18.0

Title of Invention

PRODUCTION OF SYNTHESIS GAS FROM A COAL FORMATION

Application Number:

09/841632

Confirmation Number:

4749

First Named Applicant:

Harold Vinegar

Attorney Docket Number: 5659-09200

Art Unit:

1764

Examiner:

Marian C. Knode

Search string:

(3285335 or 3456721.).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
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61	2	3456721	1969-07-22	Smith			

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Examiner Name	Date
George Suchtield	5/404



ELECTRONIC INFORMATION DISCLOSURE STATEMENTS

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> · Title of Invention

PRODUCTION OF SYNTHESIS GAS FROM A COAL **FORMATION**

Application Number:

09/841632

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4749

First Named Applicant:

Harold Vinegar

Attorney Docket Number: 5659-09200

Art Unit:

1746

Examiner:

Monique M. Wills

Search string:

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US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind Cla	ass S	ubclass
O	1	3026940	1962-03-27	. Spitz			
69	. 2	3947683	1976-03-30	Schultz et al.			

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Attorney Docket Number: 5659-09200

Examiner:

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or 4776638 or 4856587 or 5517593 or 5099918 or 5751895 or 6015015 or

6112808).pn.

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George Suchtield	5/6/04



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

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Invention

Title of

Application Number:

09/841632

Confirmation Number:

4749

First Named Applicant:

Harold Vinegar

Attorney Docket Number: 5659-09200

Examiner:

Unknown Unknown

Search string:

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3892270).pn.

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Note: Applicant is not required to submit a paper copy of cited US Patent Documents

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	2	3952802	. 1976-04-27	Terry	ĺ		•
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PRODUCTION OF SYNTHESIS G. FROM A COAL FORMATION

Application:

Confirmation: 4749

Applicant(s):

Harold Vinegar

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or 4669542 or 4682652 or 4982786 or 5201219 or 5339904 or 3349845).pn.

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George Suchfield	5/6/04



Electronic Information Disclosure Statement

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PRODUCTION OF SYNTHESIS GAS FROM A COAL FORMATION

Application:

Confirmation:

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Applicant(s):

Harold Vinegar

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69	P06	5126037	1992-06- 30		Showalter
	P07	3477058	1968-11- 04	1115 31 111 0 1000100010001501150110111111	Vedder et al.
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APPLICANT: Virginit al.

SERIAL NO. 09/841,632

GROUP: 1621

FILING DATE: April 24, 2001

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Page 1 of 1

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ATTY. DKT. NO. 5659-09200

Vinagas at al

SERIAL NO. 09/841,632

APPLICANT: Vinegar et al.

CONFIRMATION NO.: 4749

FILING DATE: April 24, 2001

ART UNIT: 1746

U.S. PATENT DOCUMENTS

	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	FILING DATE IF APPROPRIATE
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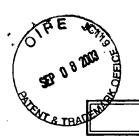
EXAM. INITIALS	REF. DES.	OTHER ART (including Author, Title, Date, Pertinent Pages, etc.)
07	AA11	Van Krevelen, D. W.; COAL: Typology-Physics-Chemistry-Constitution, 1993, p. 371.
	4	

EXAMINER:

George Suchtield

DATE CONSIDERED:

5/6/04



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
Stylesheet Version v18.0

Title of Invention

PRODUCTION OF SYNTHESIS GAS FROM A COAL FORMATION

Application Number:

09/841632

Confirmation Number:

4749

First Named Applicant:

Harold Vinegar

Attorney Docket Number: 5659-09200

Art Unit:

1746

Examiner:

Monique M. Wills

Search string:

(3947656).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
69	1	3947656	1976-03-30	Lodi			

Signature

Examiner Name	Date
George Suchtield	5/6/04



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18 Stylesheet Version v18.0

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PRODUCTION OF SYNTHESIS GAS FROM A COAL **FORMATION**

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1746

Examiner:

Monique M. Wills

Search string:

(4931171 or 4737267 or 4384948 or 3593790

or 3497000 or 3244231 or 3223166).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
65	1	4931171	1990-06-05	Piotter			
	2	4737267	1988-04-12	Pao et al.			·
	3	4384948	1983-05-24	Barger			
	4	3593790	1971-07-20	Herce			•
	5	3497000	1970-02-24	Hujsak et al.			•
	6	3244231	1966-04-05	Grekel et al.	•		
09	7	3223166	1965-12-14	Hunt et al.			

Signature

Examiner Name	Date
George Suchtield	5/6/04

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)



ATTY. DKT. NO. 5659-09200

APPLICANT: Vinegar et al.

FILING DATE: April 24, 2001

SERIAL NO. 09/841,632

GROUP: 1746/PECE/VED

		Taut	J.S. PATENT D	OCUMENTS			AUG 18 2003		
EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING PATE IF APPROPRIATE		
69	S5	2,857,002	10/21/1958	Pevere et al.					
69	UI	3,165,154	1/12/1965	Santourian					
59	U2	4,458,757	7/10/1984	Bock et al.					
	L		FOREIGN PATENT	DOCUMENTS			<u></u>		
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09		Burnham, Alan, K. "Oil S		ence of timing and cor	mposition on	temperature	and heating rate",		
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Information Disclosure Statement--PTO 1449 (modified)

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement



SERIAL NO. 09/841,632

GROUP: 1746

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•		T20	"SKIFEROLJA GENOM UPPVARMNING AV SKIFFERBERGET," Faxin Department och Name 1941, (5
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1		T22	Ronnby E "KVARNTORP Sveriges Storeta skutterolletindustri " 19/19 (9
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	69	T23	SAAB report, "The Swedish Shale Oil Industry," 1948 (8 pages).
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		T25	Hedback, T. J., The Swedish Shale as Raw Material for Production of Power, Oil and Gas," XIth Sectional Meeting World Power Conference, 1957 (9 pages)
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		T28	"Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Memorandum re: tests", 1955 Vol. 3, (256 pages) English.
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•			Analytical", 1953-1954, (166 pages). Swedish
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		T36	SSAB report, "Cost Comparison of Mining and Processing of Shale and Dolomite Using Various Production Alternatives", 1960, (64 pages). Swedish
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		T46	SSAB report, "Maps and Diagrams, Geology," 1947 (137 pages). Swedish.

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Page 2 of 3

Information Disclosure Statement--PTO 1449 (modified)

Form PTO-1449 (modified) ATTY. DKT. NO. 5659-09200 SERIAL NO. 09/841,632 List of Patents and Publications For Applicant's Information APPLICANT: Vinegar et al. GROUP: 1746 Disclosure Statement (Use several sheets if necessary) FILING DATE: April 24, 2001 SSAB report, "Styrehseprotoholl," 1943 (10 pages): Swedish: T48 SSAB report, "Early Shale Retorting Trials" 1951-1952; (134-pages). Swedish T49 SSAB report, "Analysis of Lujunstrom Oil and its Use as Liquid Fuel," Thesis by E. Pals Swedish. T50 SSAB report, "Environmental Sulphur and Effect on Vegetation," 1951 (50 pages). Swedish T51 SSAB report, "Tar Sands", Vol. 135.1953 (20 pages, pages 12-15 translated). Swodish. T52 SSAB report, "Assessment of Skanes Area (Southern Sweden) Shales as Fuel Source," 1954 (54 pages). Swedish. SSAB report, "From as Utre Dn Text Goology Reserves," 1960 (93 pages). Swedish. T53 T54 SSAB report, "Kvarntorps-Environmental Area Assssment," 1981 (50 pages). Swedish.

* not in compliance with MPEP Section 609

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George Suchfield

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5/6/04